



Faculty of Applied and Creative Arts

INTERACTIVE PROMOTIONAL DESIGN FOR ZOO MELAKA

Lau Wai Sin

Bachelor of Applied Arts with Honours
(Design Technology)
2014

Interactive Promotional Design for Zoo Melaka

LAU WAI SIN

This project is submitted in partial fulfilment of
the requirements for the degree of Bachelor of Applied Arts with Honours
(Design Technology)

Faculty of Applied and Creative Arts

UNIVERSITI MALAYSIA SARAWAK

2014

UNIVERSITI MALAYSIA SAWARAK

Grade: _____

Please tick (✓)

Final Year Project Report

☒

Masters

☐

PhD

☐

DECLARATION OF ORIGINAL WORK

This declaration is made on the8.....day of.....July.....2014.

Student's Declaration:

I LAU WAI SIN, 30711, FACULTY OF APPLIED & CREATIVE ARTS (FSGK) hereby declare that the work entitled, Interactive Promotional Design for Zoo Melaka is my original work. I have not copied from any other students' work or from any other sources except where due reference or acknowledgement is made explicitly in the text, nor has any part been written for me by another person.

8/7/2014

Date submitted



LAU WAI SIN (30711)

Supervisor's Declaration:

I----- (SUPERVISOR'S NAME) hereby certifies that the work entitled, ----- (TITLE) was prepared by the above named student, and was submitted to the "FACULTY" as a * partial/full fulfilment for the conferment of ----- (PLEASE INDICATE THE DEGREE), and the aforementioned work, to the best of my knowledge, is the said student's work

Received for examination by:

Azwan Abidin

(Name of the supervisor)

Date:

8/7/14

I declare this Project/Thesis is classified as (Please tick (✓)):

- ☐ **CONFIDENTIAL** (Contains confidential information under the Official Secret Act 1972)*
☐ **RESTRICTED** (Contains restricted information as specified by the organization where research was done)*
☒ **OPEN ACCESS**

Validation of Project/Thesis

I therefore duly affirmed with free consent and willingness declared that this said Project/Thesis shall be placed officially in the Centre for Academic Information Services with the abide interest and rights as follows:

- This Project/Thesis is the sole legal property of Universiti Malaysia Sarawak (UNIMAS).
- The Centre for Academic Information Services has the lawful right to make copies for the purpose of academic and research only and not for other purpose.
- The Centre for Academic Information Services has the lawful right to digitise the content to for the Local Content Database.
- The Centre for Academic Information Services has the lawful right to make copies of the Project/Thesis for academic exchange between Higher Learning Institute.
- No dispute or any claim shall arise from the student itself neither third party on this Project/Thesis once it becomes sole property of UNIMAS.
- This Project/Thesis or any material, data and information related to it shall not be distributed, published or disclosed to any party by the student except with UNIMAS permission.

Student's signature: _____

(Date: 8/7/2014)

Supervisor's signature: _____

(Date: 8/7/14)

Current Address:

82, Jalan S/J 5, Taman Setia Jaya, 83000 Batu Pahat, Johor

Notes: * If the Project/Thesis is **CONFIDENTIAL** or **RESTRICTED**, please attach together as annexure a letter from the organization with the period and reasons of confidentiality and restriction.

[The instrument was duly prepared by The Centre for Academic Information Services]

DECLARATION

The project entitled **“Interactive Promotional Design for Zoo Melaka”** was prepared by **Lau Wai Sin** and submitted to the Faculty of Applied and Creative Arts in partial fulfillment of the requirements for a Bachelor of Applied Arts with Honours (Design Technology).

Received for examination by:



(Mr. Azwan bin Abidin)

Supervisor

Design Technology Department

Date: 8/7/14

Acknowledgement

I would like to express my special thanks of gratitude to my supervisor Mr Azwan bin Abidin, whose contribution in suggestions and encouragement, helped me to coordinate my project especially in writing this report. Without his supervision and constant help this dissertation would not have been possible. Deepest gratitude also due to the lecturers from the majoring of graphic design, without their knowledge and assistance, this project would not have been successful.

Finally, an honourable mention goes to my families and friends for their understandings and supports in completing this project. Without helps of the particular that mentioned above, I would face many difficulties while doing this project.

CONTENT

MATTER	PAGES
APPROVAL SHEET	
DECLARATION	
ACKNOWLEDGEMENTS	I
CONTENT	II
Abstract	IX
Abstrak	X

CHAPTER 1 INTRODUCTION

1.0	Research Background	1
1.1	Research Objectives	3
1.2	Problem Statements	3
1.3	Scope of Study	4
1.4	Research Limitation	4

CHAPTER 2 LITERATURE REVIEW

2.0	Design	5
2.1	Interaction Design (IXD)	6
2.2	User Experience (UX)	7
2.3	User Interface (UI)	7
2.4	User Research	8
2.5	Strategy Promotion	9

CHAPTER 3 METHODOLOGY

3.0	Interview	10
3.1	Questionnaire	11

CHAPTER 4 DATA ANALYSIS

4.0	Questionnaire	12
4.0.1	Section A: Demographic	12
4.0.2	Section B: General	17
4.0.3	Section C: Recommendation	22
4.1	Interview	24
4.1.1	Scenario 1	24

4.1.2	Scenario 2	25
4.1.3	Scenario 3	26

CHAPTER 5 RECOMMENDATION AND DESIGN

5.0	Current Promotion Design	27
5.1	Design Concept	29
5.2	Ideas Development	30
5.3	Proposed Interactive Promotion Design	31
5.3.1	Logo Development	31
5.3.2	Interactive Web Design	32
5.3.3	Mobile Application	35

CHAPTER 6 VALIDATION

6.0	Executive Summary	39
6.1	Methodology	39
6.1.1	Session	39
6.1.2	Participants	40
6.1.3	Evaluation Tasks / Scenarios	41
6.2	Result	41
6.2.1	Section A: Demographic	41

6.2.2	Section B: Evaluation Task / Scenario (Mobile Apps)	42
6.2.3	Section C: Evaluation Task / Scenario (Website)	42
6.2.4	Time on Task	43
6.2.5	Errors	44
6.2.6	Section D: Validation	45
6.2.7	Recommendations and Improvement	47
CHAPTER 7	CONCLUSION	49
BIBLIOGRAPHY		50
APPENDIX		51

LIST OF FIGURES

MATTER	PAGES
Figure 4.1: Scenario 1, from Tan Ching Aun.	24
Figure 4.2: Scenario 2, from Shaiful Hamil.	25
Figure 4.3: Scenario 3, from Nurul Nabila.	26
Figure 5.1: Zoo Melaka Official Website, Internet Explorer interface.	27
Figure 5.2: Zoo Melaka Official Website, Firefox interface.	28
Figure 5.3: Zoo Melaka Official Website, Google Chrome interface.	28
Figure 5.4: Animal character design development.	29
Figure 5.5: Zoo Melaka Logo Development Process.	31
Figure 5.6: Sitemap of the interactive web design.	32
Figure 5.7: Wireframe and size recommended for the interactive web design.	33
Figure 5.8: Development process of interactive web interface design.	34
Figure 5.9: Finalized interactive web interface design.	34
Figure 5.10: Iphone 4s screen dimension.	35
Figure 5.11: User Journey of the Mobile application.	36
Figure 5.12: Finalized mobile application user interface design.	37
Figure 5.13: Finalized mobile application user interface design.	37
Figure 6.1: Test administrator and participants carry out the usability testing.	48

LIST OF GRAPH

MATTER	PAGES
PIE CHART	
Chart 1: Respondent's Gender.	12
Chart 2: Respondent's age.	13
Chart 3: Respondent's education background.	14
Chart 4: Races of respondent.	15
Chart 5: Respondent's occupation.	16
Chart 6: How often respondent visit zoo in a year?	17
Chart 7: Do you ever surf the website of Zoo Melaka?	18
Chart 8: How long do you spend your time to surf the website of Zoo Melaka?	19
Chart 9: Do you think it would be interesting for information of Zoo Melaka to be applied on mobile application and interactive website?	21
Chart 10: Respondent's gender.	41
BAR CHART	
Graph 1: What types of information do you wish to search through the website of Zoo Melaka?	20
Graph 2: What is the suitable theme for mobile apps and web design for Zoo Melaka?	22

Graph 3: What type of information is important in mobile apps and website for Zoo Melaka?	23
Graph 4: Overall ratings (Mobile Application)	45
Graph 5: Overall ratings (Website)	46

LIST OF TABLE

MATTER	PAGES
Table 1: Task completion rates for the mobile application.	42
Table 2: Task completion rates for the Website.	42
Table 3: Time on Task for Mobile Apps.	43
Table 4: Time on Task for Website.	44
Table 5: Errors make by Participants for Mobile Apps.	44
Table 6: Errors make by Participants for Website.	45
Table 7: Recommendation for Mobile Apps.	47
Table 8: Recommendation of Website.	47

Abstract

Technology has been a part of our daily life. This interactive design is an initiative new branding for Zoo Melaka. Researcher will focus on the product development process based on virtual prototyping, which allows earlier evaluation of product performance from the users. Through the multi-platform usability testing, the impact integration of visual study and UX (user experience) is given new experience for visitors as well as awareness of the environment and animals.

Abstrak

Teknologi telah menjadi sebahagian daripada kehidupan manusia. Reka bentuk interaktif ini adalah penjenamaan inisiatif baru bagi Zoo Melaka. Penyelidik memberikan tumpuan kepada proses pembangunan produk berdasarkan prototaip yang akan memberikan penilaian awal prestasi produk daripada pengguna. Melalui kepelbagaian pelantar untuk Usability Testing, kesan integrasi kajian visual dan UX (User Experience) akan memberikan pengalaman digital baru serta kesedaran alam dan haiwan bagi pelawat zoo.

CHAPTER I

INTRODUCTION

1.0 Research Background

The Zoo Melaka is acknowledging as the second largest zoo in Malaysia behind the National Zoo which is located at Ulu Klang, Selangor. It was established in 1963, along with the National Zoo of Malaysia (Zoo Negara), but its management was later taken over by the Department of Wildlife and National Parks of Malaysia in 1979. The zoo is located in Ayer Keroh, Malacca. Although it has been open to the public for such a long time, but its primary roles as a rescue based and an animal sanctuary is remain the same.

This project is to research towards the interactive promotional design and intend to create a better user experience (UX) for the visitors of Zoo Melaka. In this research, researcher is more consider about the user interface (UI) and apply user extensive experience in the interactive promotional design (Clark, 2008). Furthermore, the research will based on the needs of the target audience which is the visitors of zoo and also provide a convenient media environment for them to make them access or connect with the zoo easily. The goal of the research is to create a better user experience (UX) through the interactive and promotion design for the visitors of Zoo Melaka.

Body of knowledge devoted to creating tools, processing actions and extracting of materials is all describe about technology. It has been a part of our everyday environment for generation. Technology is about taking action to meet a human need,

therefore we use technology to accomplish various tasks in our daily lives, to extend our abilities, and that makes people as the most important part of any technological system (Fallone, 2012).

On the other hand, design is about defining how the users interact with the product, based on the understanding of who they are, why they use and what they want to achieve. Every design is influenced by external factors such as consumer needs, the state of the market, customer expectations and consumer laws (Norman, 1998).

Interaction design, like user experience (UX) design, it has evolved to facilitate interactions between user and their environment. Besides, user interface (UI) design is all about the crossover between visual design (look and feel) and the interaction design (how the look and feel of work). Combine those two and you have an interface. Throughout the entire development process, researcher will plan for a design strategy to assess the goals of the target audience or user (Pyla, 2012).

A design strategy will help the researcher have a common understanding of what interactions need to take place to facilitate user goals. After that, researcher will identify and wireframe the key interactions. It is a step for researcher to sketch the interfaces that will facilitate the necessary interactions. The next logical step for researcher is involving the creation of prototypes (Stone, 2013).

Last but not least, the usability test is carried out to evaluate the final prototype of product. This can be seen as an irreplaceable usability practice, since it gives direct input on how real users to use the product.

1.1 Research Objectives

- To identify the strength and weakness of interactive based promotional design for Zoo Melaka.
- To analyze data from feedback for visitors and web user of Zoo Melaka.
- To propose interactive promotional design for Zoo Melaka with usability studies.
- To validate the final product based on usability testing.

1.2 Problem Statements

- **Interactive Design**

The interactive design for the website of Zoo Melaka is lack of interactive between the users and zoo itself. The website of Zoo Melaka is lack of information and has poor readability content. The using of non-contrasting colours has made text difficult to read. The inconvenient and problem of website lead to the visitors or user lost the interest to visiting the zoo. The imperfect of user interface (UI) design and user experience (UI) design also will result in lack of interest of the visitors or users.

- **Strategy Promotion**

One of the necessities for getting the brand in the public and attracting new customers is product promotion (Newman, 2011). The strategy promotion for Zoo Melaka is lack of exposure of promotion for both offline and online media.

1.3 Scope of Study

The research will focus on the user interface (UI) design and user experience (UX) design aim to create the interaction between the visitors and zoo. Furthermore, respondent's perception and opinion towards the interactive design and strategy promotion will be considerate and also collect by using both qualitative and quantitative methods. Scenario of the target audience will be collected intend to focus design and understanding on the user's needs. The data will be collected from the respondent from different background, religions and races in order to help the researcher to complete the research. Target audience for this research will be focus on both male and female which between 20 – 50 years old, parents and visitors of the zoo.

1.4 Research Limitation

Although the research has reached its aims, there were some unavoidable limitations. In the research period, the research will based on the Zoo Melaka which located in Ayer Keroh, Malacca. The limitation of time duration and distance of zoo have made the inconvenient for researcher. Besides, the desire and the demand of different group of respondent are different.

CHAPTER 2

LITERATURE REVIEW

2.0 Design

"...Design should be the crucial anvil on which the human environment, in all its detail, is shaped and constructed for the betterment and delight of all..."

(Heskett, 2005, Design: A Very Short Introduction, p.1)

According to Heskett (2005), The design aspect for the Zoo Melaka should integrate and built up with the environment and should be detail and constructed for enrichment the design.

"...Design is an iterative process and design thinking is present in each stage of the journey from client brief to finished work..."

(Harris, 2010, Basics Design 08: Design Thinking, p. 5)

According to Harris (2010), different solutions can be produced for given brief and these can differ widely in levels of creativity, practicality and budget. Therefore, the creativity and practicality of the interactive promotional design for Zoo Melaka are going through under the iterative process and design thinking which is important for a better design.

2.1 Interaction Design (IxD)

Interaction design (IxD) is designing interactive products to support the way people communicate and interact in their everyday and working lives. Put another way, it is about creating user experiences that enhance and augment the way people work, communicate, and interact.

The focus of interaction design is very much concerned with practice, i.e. how to design user experience. It is not wedded to a particular way of doing design, but is eclectic, promoting the use of a range of methods, techniques, and frameworks.

(Rogers, Sharp & Preece, 2011, p.9)

Interaction design is now specialty in the field of technology that can act as a connecting entity between hardware and software production, and it is now expanded to be used for both human-to-human and computer-to-computer communication. The interactive promotional design will focused on the interaction design intends to create the interactive between the users and zoo.

The study of the research also has to know what is the comment language should be used to communicate with the user or visitors of the zoo. Every instance of communicating involves action and reaction. Therefore the interaction design for zoo must anticipate the possible and probable reactions to each action for both sides.

In addition, the user must be understood the condition or state of the device in order to understand if the communication is occurring. In turn, the device must be aware of condition of the user so it can predict how to reaction to each action. Furthermore, the flow of the computer operation is designed around the flow of human

operation. Therefore the researcher has to study the user journey for making a smoothly flow. Last but not least, the miscommunication, mistakes and errors that can occur must be predicted in order to create the better interaction design.

2.2 User Experience (UX)

"...Most of the disciplines fall at least partially under the umbrella of user-experience design, the discipline of looking at all aspects – visual design, interaction design, sound design, and so on – of the user's encounter with a product, and making sure they are in harmony..."

(Saffer, 2010, *Designing for Interaction*, p.20)

Researcher has to follow the disciplines under the umbrella of user-experience design as what Saffer (2010) stated when the project is going on. UX is the intangible design of a strategy that brings us to a solution. It is how a person feels when interfacing with a system.

2.3 User Interface (UI)

"...User interface design is a subset of a field of study called human-computer interaction (HCI). Human-computer interaction is the study, planning, and design of how people and computers work together so that a person's needs are satisfied in the most effective way."

HCI designers must consider a variety of factors: what people want expect, what physical limitations and abilities people possess, how their perceptual and information processing system work, and what people find enjoyable and attractive ...”

(Galitz, 2007, *The Essential Guide to User Interface Design (3rd Edition)*, p.4)

User interface refers to the combination of approaches and elements that allow the user to interact with a system. UI is a powerful tool and front-end that helps to create a great user experience. UI is all about the ability to design or create icons, colors, text, and affect a number of other elements that solve problems dealing with direct interactions to the user. Those elements are fantastic tools to affect part of the user experience. It is how a person feels when interfacing with a system. The system could be a website, a web application or mobile apps, generally denoted by some form of human-computer interaction (HCI).

2.4 User Research

“... User Research implies different things to different people. Regarding “user” in user research, Edward Tufte famously said: “Only two industries refer to their customers as ‘users’: computer design and drug dealing.” User research is the systematic study of the goals, needs, and capabilities of users so as to specify design, construction, or improvement of tools to benefit how users work and live...”

(Lewis, 2012, *Quantifying the User Experience: Practical Statistics for User Research*, p.9)

The user research is important in this research. Through the usability testing, it remains a central way of determining whether users are accomplishing their goal. The usability

test is carrying out to find and fix a problem or find out a solution. Most test contain some combination of completion rates, errors, task times, task-level satisfaction, test-level satisfaction, help access, and lists of usability problems.

2.5 Strategy Promotion

"...When considering the planning of a promotional campaign it is important from the outset to have a clear understanding of what a plan is and what use it has to the management of the promotional campaign. A plan is simply a design for achieving a specific objective (or several specific objectives)..."

(Woodcock, 2003, *Marketing and Promotional Strategy*, p.3)

Promotion is the method you use to spread the word about your product or service to customers, stakeholders and the broader public. There are numerous ways to promote a product or service. For example, through the social media to promote products and services offer a more relaxed environment. Social networks connect with a world of potential customers that can view your company from a different perspective.